FIG.1

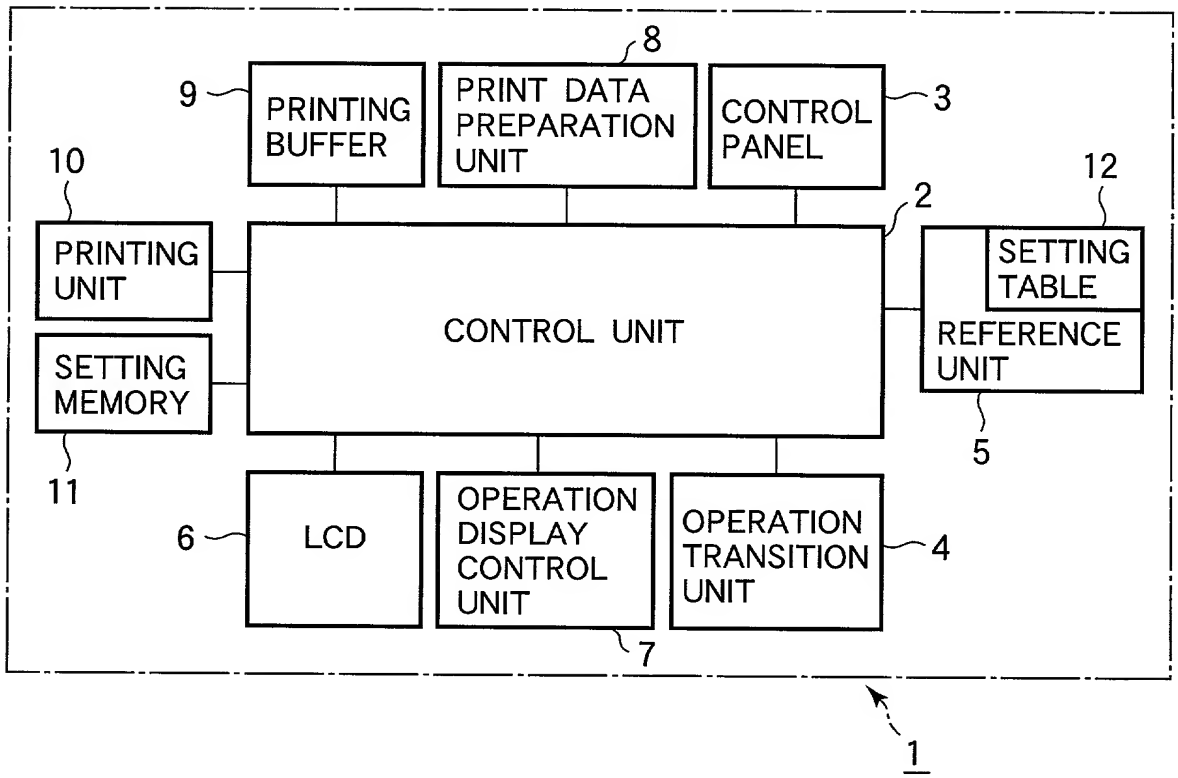
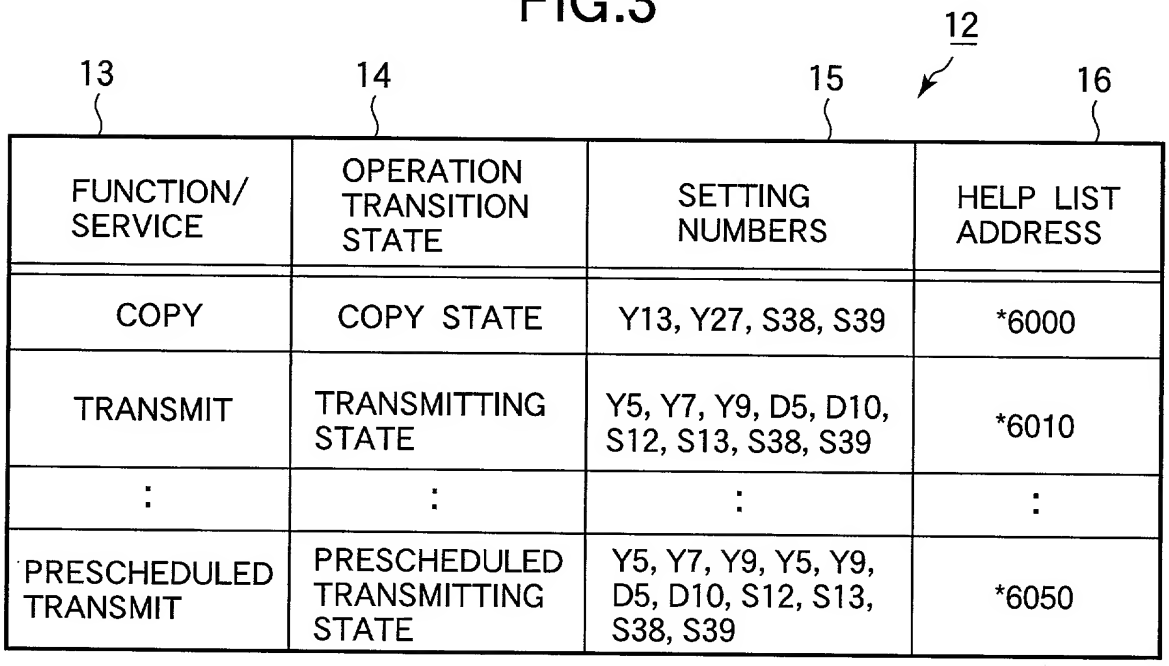


FIG.3



13 FUNCTION/ SERVICE	14 OPERATION TRANSITION STATE	15 SETTING NUMBERS	16 HELP LIST ADDRESS
COPY	COPY STATE	Y13, Y27, S38, S39	*6000
TRANSMIT	TRANSMITTING STATE	Y5, Y7, Y9, D5, D10, S12, S13, S38, S39	*6010
:	:	:	:
PRESCHEDULED TRANSMIT	PRESCHEDULED TRANSMITTING STATE	Y5, Y7, Y9, Y5, Y9, D5, D10, S12, S13, S38, S39	*6050

FIG.2

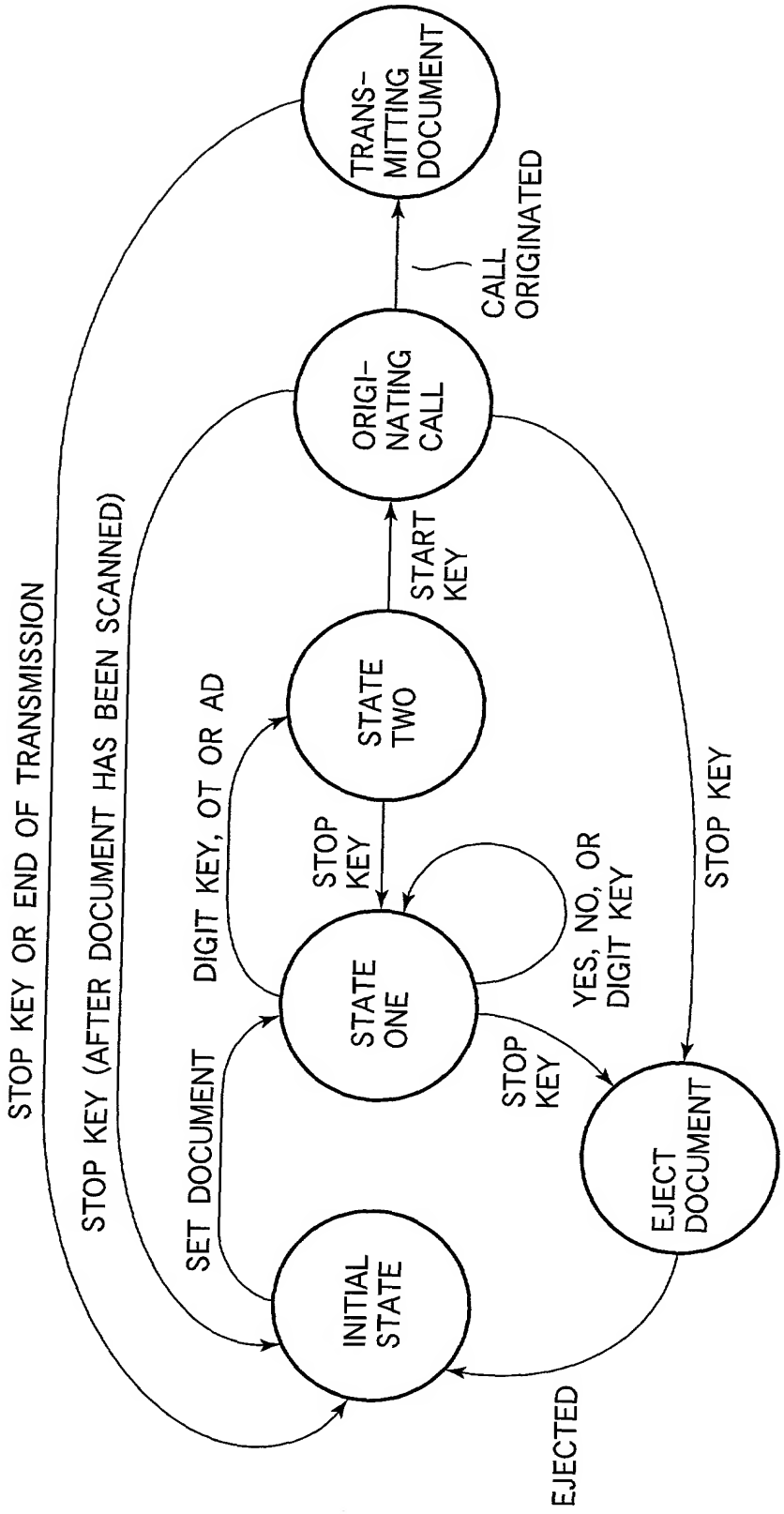
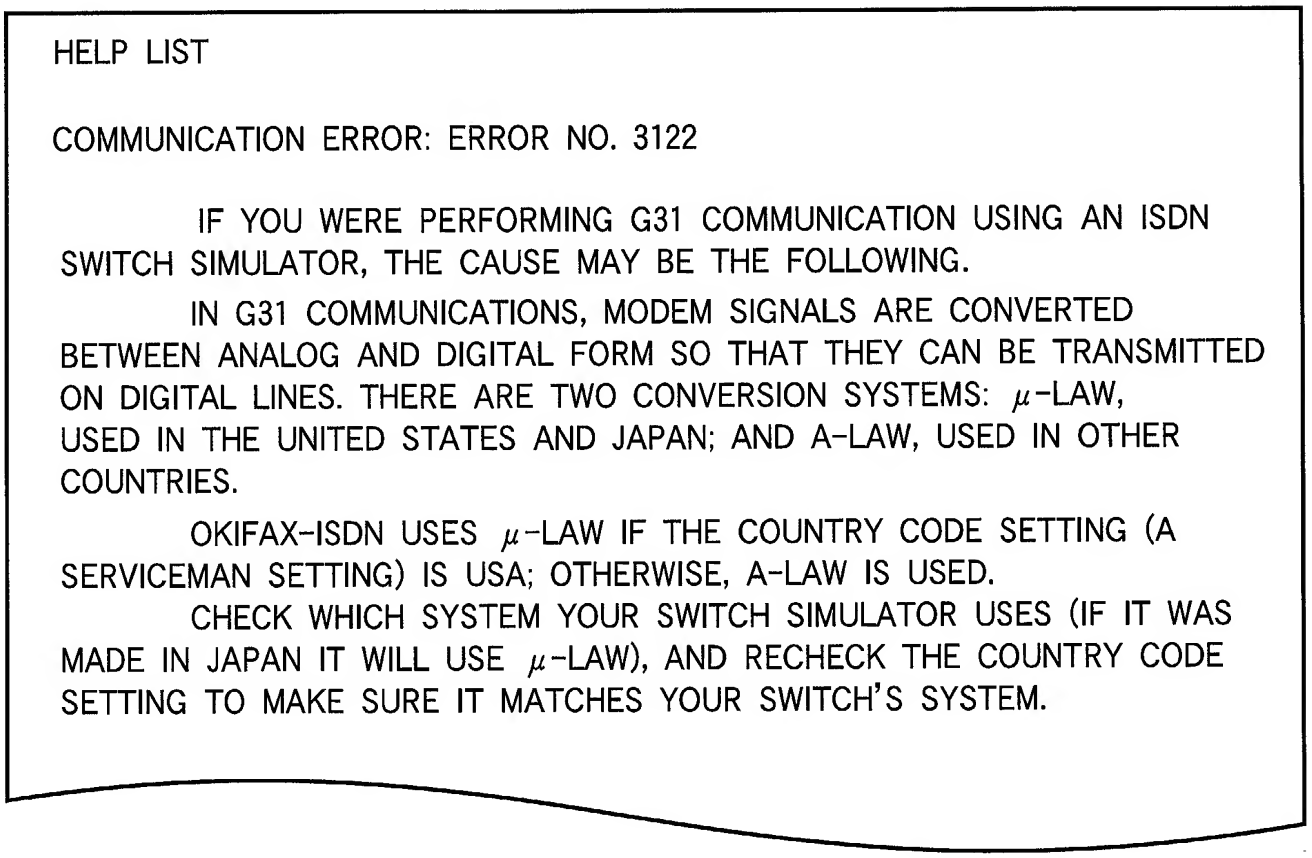

TRANS-
MITTING
DOCUMENT
CALL
ORIGINATED
ORIGI-
NATING
CALL
START
KEY
STATE
TWO
STOP
KEY
STATE
ONE
YES, NO, OR
DIGIT KEY
STOP
KEY
STOP KEY
EJECT
DOCUMENT
INITIAL
STATE
SET DOCUMENT
DIGIT KEY, OT OR AD
STOP KEY (AFTER DOCUMENT HAS BEEN SCANNED)
STOP KEY OR END OF TRANSMISSION
EJECTED

FIG.4

USER SETTINGS (Y)		DIAL OPTIONS (D)		SERVICEMAN SETTINGS (S)	
01:MCF(SINGLE-LOC.)	ON/OFF	01:REDIAL TRIES	3TRY	01:SERVICE BIT	ON/OFF
02:MCF(MULTI-LOC.)	ON/OFF	02:REDIAL INTERVAL	3MIN	02:MONITOR CONT.	ON/OFF
03:ERR.REPORT(MCF)	ON/OFF	03:DIAL TONE DETECT	ON/OFF	03:COUNTRY CODE	GER
04:IMAGE IN MCF	ON/OFF	04:BUSY TONE DETECT	ON/OFF	04:TIME/DATE PRINT	ON/OFF
05:SENDER ID	ON/OFF	05:MF(TONE)/DP(PULSE)	MF	05:TSI PRINT	ON/OFF
06:MONITOR VOLUME LOW/MID/HIGH		06:PULSE DIAL RATE	10PPS	06:TAD MODE	TYPE2
07:BUZZER VOLUME LOW/MID/HIGH		07:PULSE MAKE RATIO	39%	07:REAL TIME DIAL	TYPE2
08:CLOSED NETWORK	ON/OFF	08:PULSE DIAL TYPE	NORMAL	08:TEL/FAX SWITCH	ON/OFF
09:TX MODE DEFAULT STD/NORMAL		09:MF(TONE)DURATION	100MS	09:MDY/DMY	MDY
10:T/F TIMER PRG.	35SEC	10:PBX LINE	ON/OFF	10:LONG DOC. SCAN	ON/OFF
11:RING RESPONSE	1RING	11:PBX TYPE	NORMAL	11:TONE FOR ECHO	ON/OFF
12:DISTINCTIVE RING	ON/OFF	12:AUTO START	ON/OFF	12:MH ONLY	ON/OFF
13:PAPER SIZE	A4	13:DIAL PREFIX	ON/OFF	13:H/MODEM RATE	33.6K
14:USER LANGUAGE	ENGLISH			14:T1(TX)TIMER VALUE	059
15:INCOMING RING	ON/OFF			15:T1(RX)TIMER VALUE	035
16:REMOTE RECEIVE	ON/OFF			16:T2 TIMER VALUE	130
17:MEM/FEEDER SWITCH MEM.				17:DIS BIT32	ON/OFF
18:POWER SAVE MODE	ON/OFF			18:ERR CRITERION VALUE	10
19:ECM FUNCTION	ON/OFF			19:OFF HOOK BYPASS	ON/OFF
20:REMOTE DIAGNOSIS	ON/OFF			20:NL EQUALIZER	OKM
21:PC/FAX SWITCH	ON/OFF			21:ATTENUATOR	10DB
22:NO TONER MEM. RX	ON/OFF			22:T/F TONE ATT	10DB
23:MEM FULL SAVE	ON/OFF			23:MF. ATT	3DB
24:CONTINUOUS TONE	ON/OFF			24:RING DURA.*	10MS
25:INSTANT DIAL	ON/OFF			25:CML TIMING.*	100MS
26:RESTRICT ACCESS	ON/OFF			26:LED HEAD STROBE	10100
27:WIDTH REDUCTION	ON/OFF			27:MEDIA TYPE	MEDIUM
28:TONER SAVE	ON/OFF			28:TR LATCH CURRENT	0
29:CNG COUNT	1			29:NSF SWITCH	ON/OFF
30:ISDN DIAL MODE	G4			30:ID/TSI PRIORITY	ID
31:SPEECH RECEIVE	ON/OFF			31:TONER COUNT CLEAR	ON/OFF
32:USB CONV. MODE	ON/OFF			32:PARALLEL PICK UP	ON/OFF
33:PAPER SIZE CHECK	ON/OFF			33:V. 34 TX RETRY	ON/OFF
34:PRINT JOB T.O.	30SEC			34:SYMBOL RATE	3429
				35:LEASED LINE	ON/OFF
				36:CED SEND	ON/OFF

FIG.5



Title: Device With Automatic Help Function
Inventor: Atsushi OWARI
Express Mail No. EL916938537US
Attorney Docket No. 9448-119US (G0220US)

FIG.6A

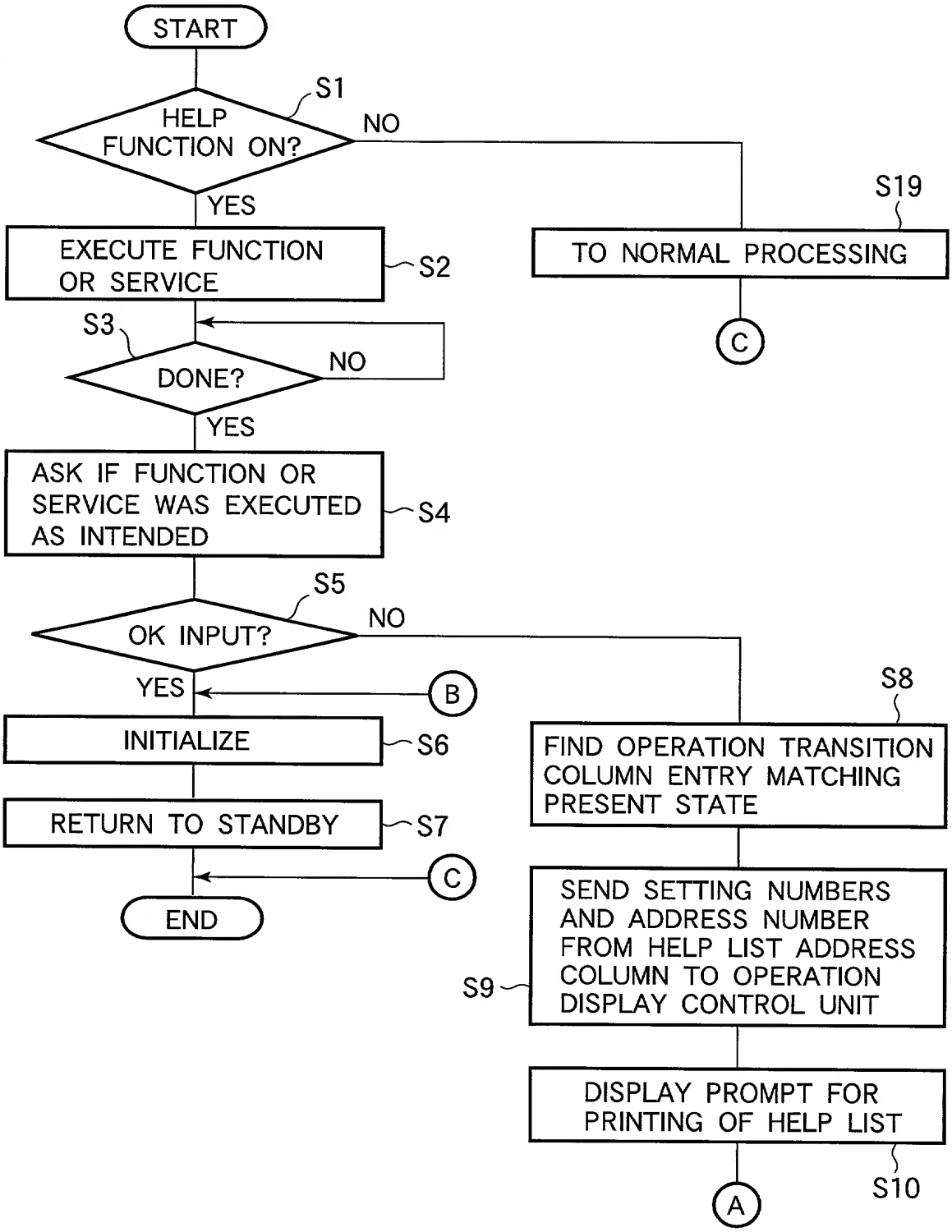

START
S1
HELP FUNCTION ON?
NO
YES
S19
TO NORMAL PROCESSING
C
EXECUTE FUNCTION OR SERVICE
S2
S3
DONE?
NO
YES
ASK IF FUNCTION OR SERVICE WAS EXECUTED AS INTENDED
S4
S5
OK INPUT?
NO
YES
B
S8
INITIALIZE
S6
FIND OPERATION TRANSITION COLUMN ENTRY MATCHING PRESENT STATE
RETURN TO STANDBY
S7
C
SEND SETTING NUMBERS AND ADDRESS NUMBER FROM HELP LIST ADDRESS COLUMN TO OPERATION DISPLAY CONTROL UNIT
S9
END
DISPLAY PROMPT FOR PRINTING OF HELP LIST
S10
A

FIG.6B

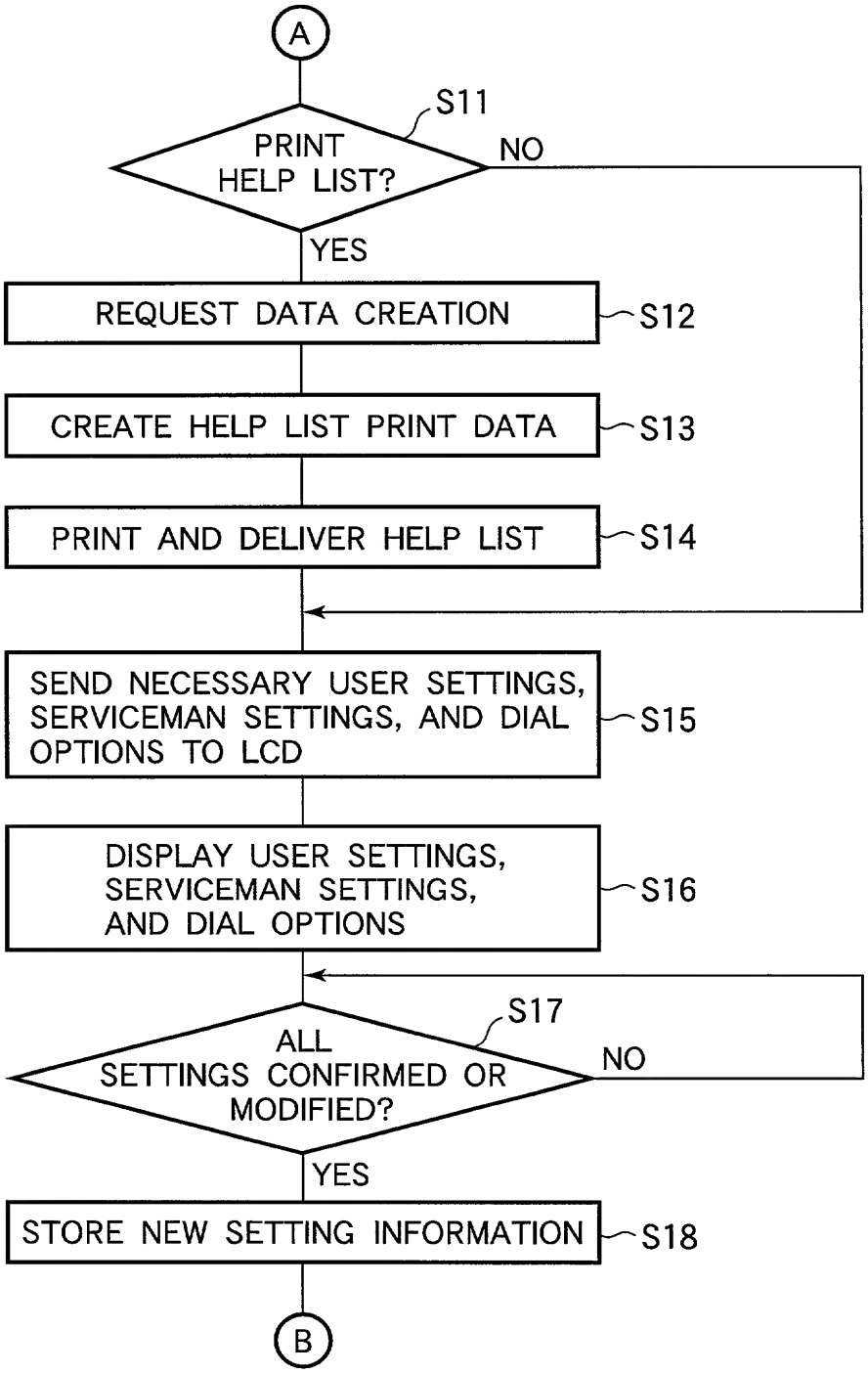

A
S11
PRINT HELP LIST?
NO
YES
REQUEST DATA CREATION
S12
CREATE HELP LIST PRINT DATA
S13
PRINT AND DELIVER HELP LIST
S14
SEND NECESSARY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS TO LCD
S15
DISPLAY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS
S16
S17
ALL SETTINGS CONFIRMED OR MODIFIED?
NO
YES
STORE NEW SETTING INFORMATION
S18
B

FIG.7

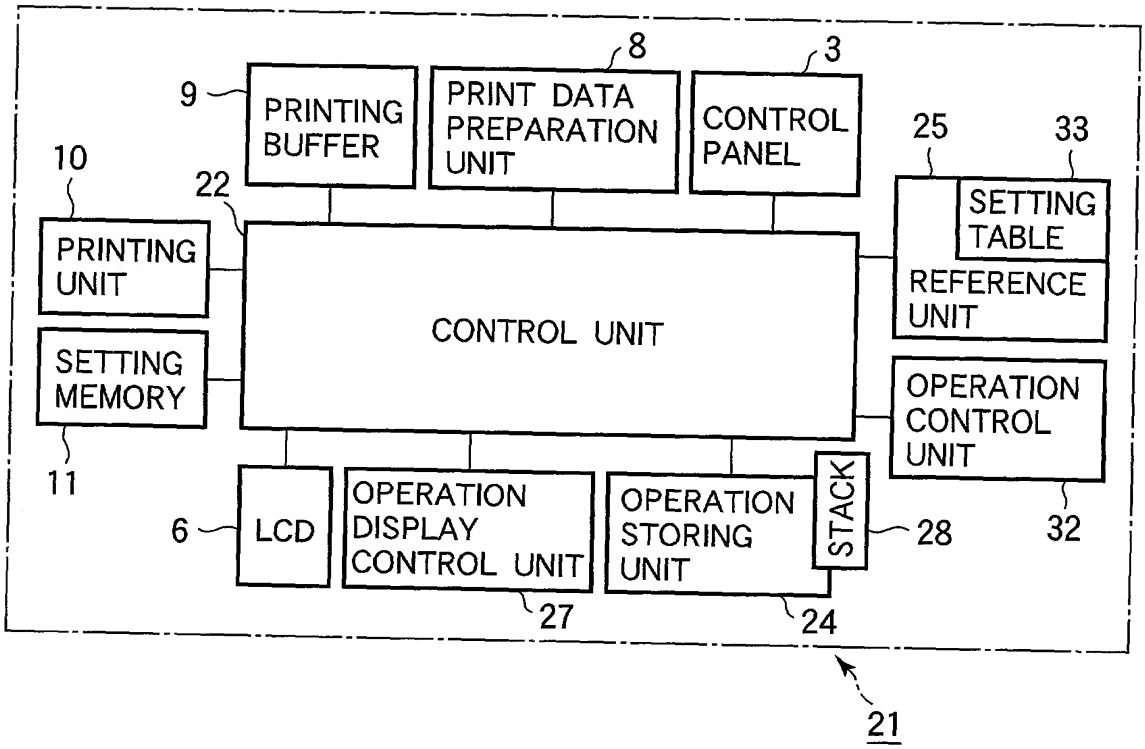


FIG.8

33

34 FUNCTION/ SERVICE	35 OPERATION TRANSITION	36 SETTING NUMBERS	37 HELP LIST ADDRESS
COPY	COPY, [COPY, TIME-OUT]	Y13, Y27, S38, S39	*6000
TRANSMIT	[TEN, OT, AD], START	Y5, Y7, Y9, Y5, Y9, D5, D10, S12, S13, S38, S39	*6010
:	:	:	:
PRESCHEDULED TRANSMIT	FUNC, OT1, YES, TEN, YES, [TEN, OT, AD], START	Y5, Y7, Y9, Y5, Y9, D5, D10, S12, S13, S38, S39	*6050

FIG.9

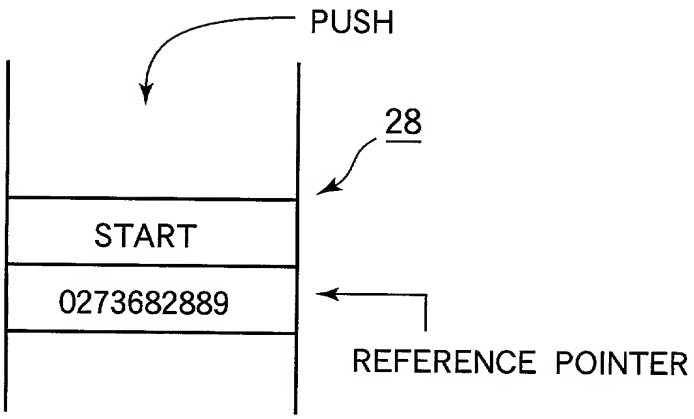


FIG.10A

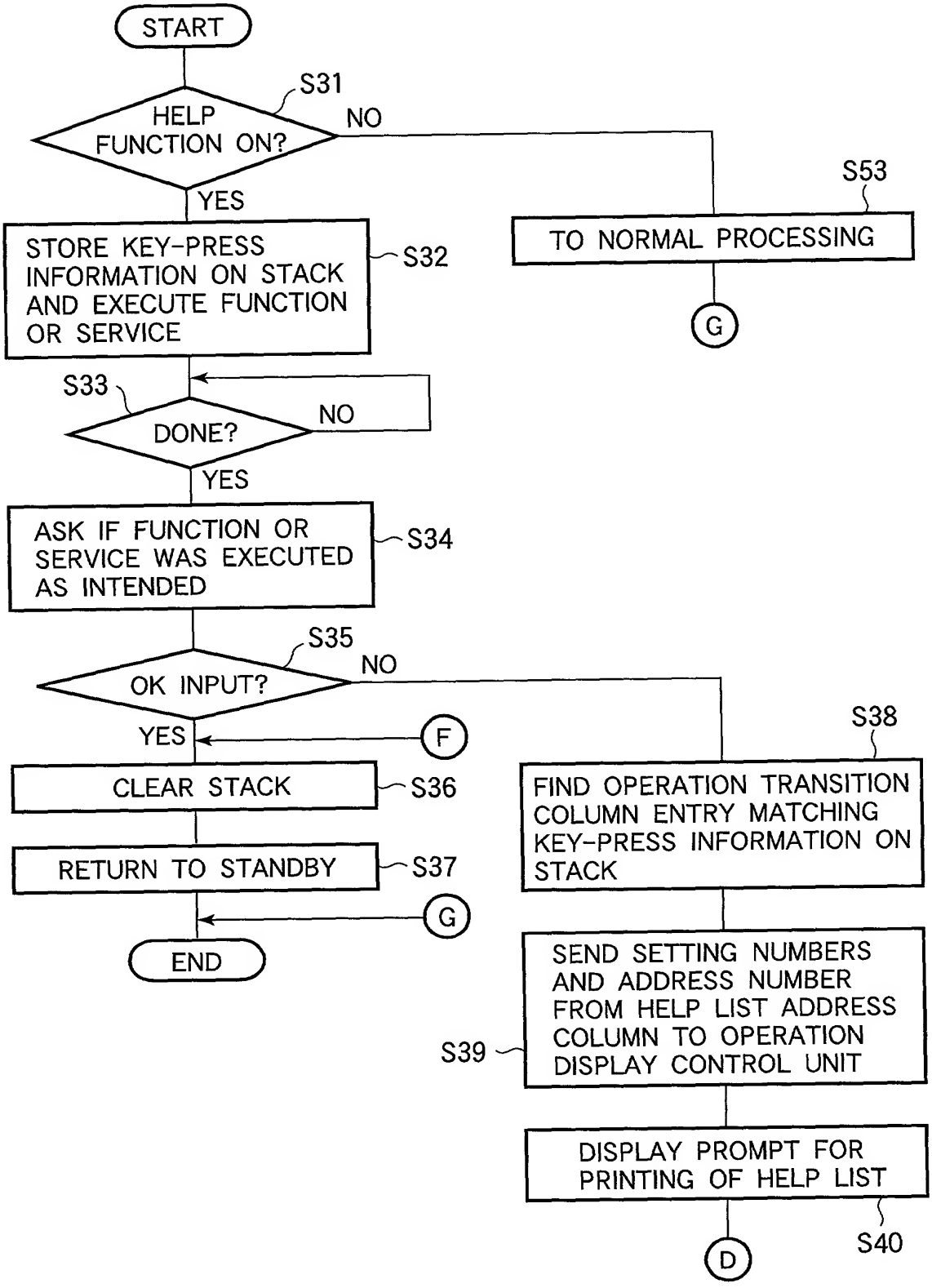

START
S31
HELP FUNCTION ON?
NO
YES
S53
TO NORMAL PROCESSING
G
STORE KEY-PRESS INFORMATION ON STACK AND EXECUTE FUNCTION OR SERVICE
S32
S33
DONE?
NO
YES
ASK IF FUNCTION OR SERVICE WAS EXECUTED AS INTENDED
S34
S35
OK INPUT?
NO
YES
F
S38
CLEAR STACK
S36
FIND OPERATION TRANSITION COLUMN ENTRY MATCHING KEY-PRESS INFORMATION ON STACK
RETURN TO STANDBY
S37
G
END
SEND SETTING NUMBERS AND ADDRESS NUMBER FROM HELP LIST ADDRESS COLUMN TO OPERATION DISPLAY CONTROL UNIT
S39
DISPLAY PROMPT FOR PRINTING OF HELP LIST
S40
D

FIG.10B

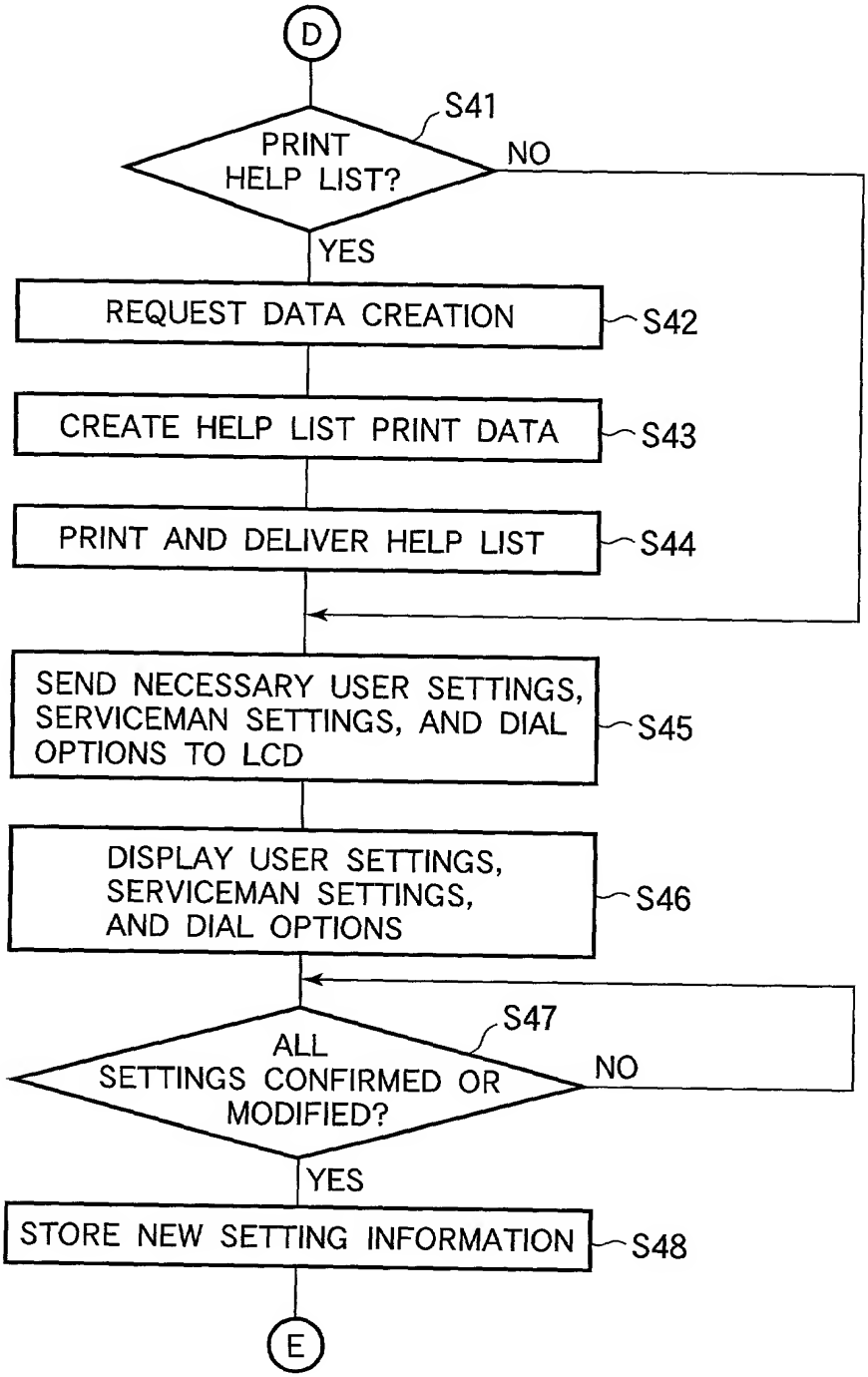

D
S41
PRINT HELP LIST?
NO
YES
REQUEST DATA CREATION
S42
CREATE HELP LIST PRINT DATA
S43
PRINT AND DELIVER HELP LIST
S44
SEND NECESSARY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS TO LCD
S45
DISPLAY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS
S46
S47
ALL SETTINGS CONFIRMED OR MODIFIED?
NO
YES
STORE NEW SETTING INFORMATION
S48
E

FIG.10C

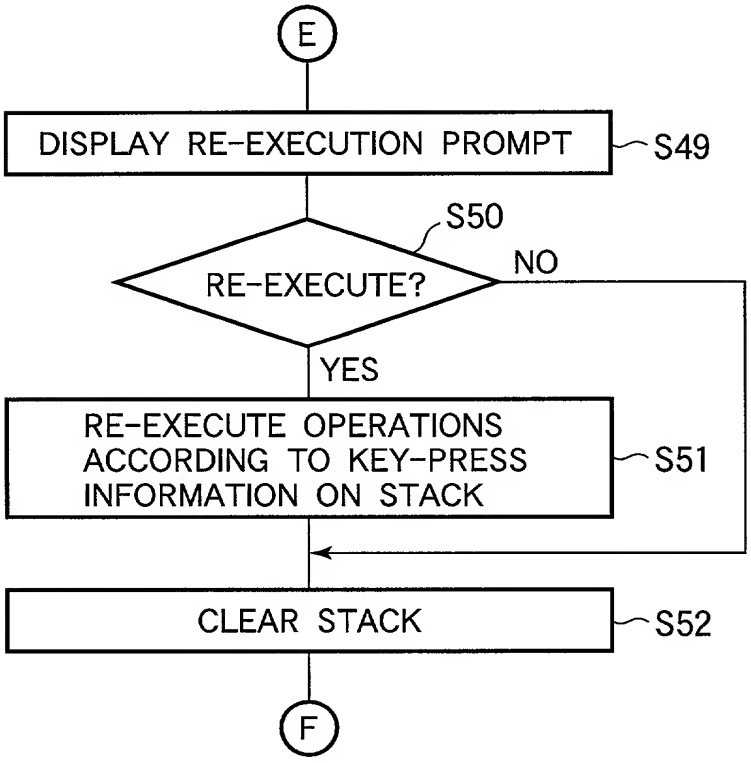

E
DISPLAY RE-EXECUTION PROMPT
S49
S50
RE-EXECUTE?
NO
YES
RE-EXECUTE OPERATIONS ACCORDING TO KEY-PRESS INFORMATION ON STACK
S51
CLEAR STACK
S52
F

FIG.11

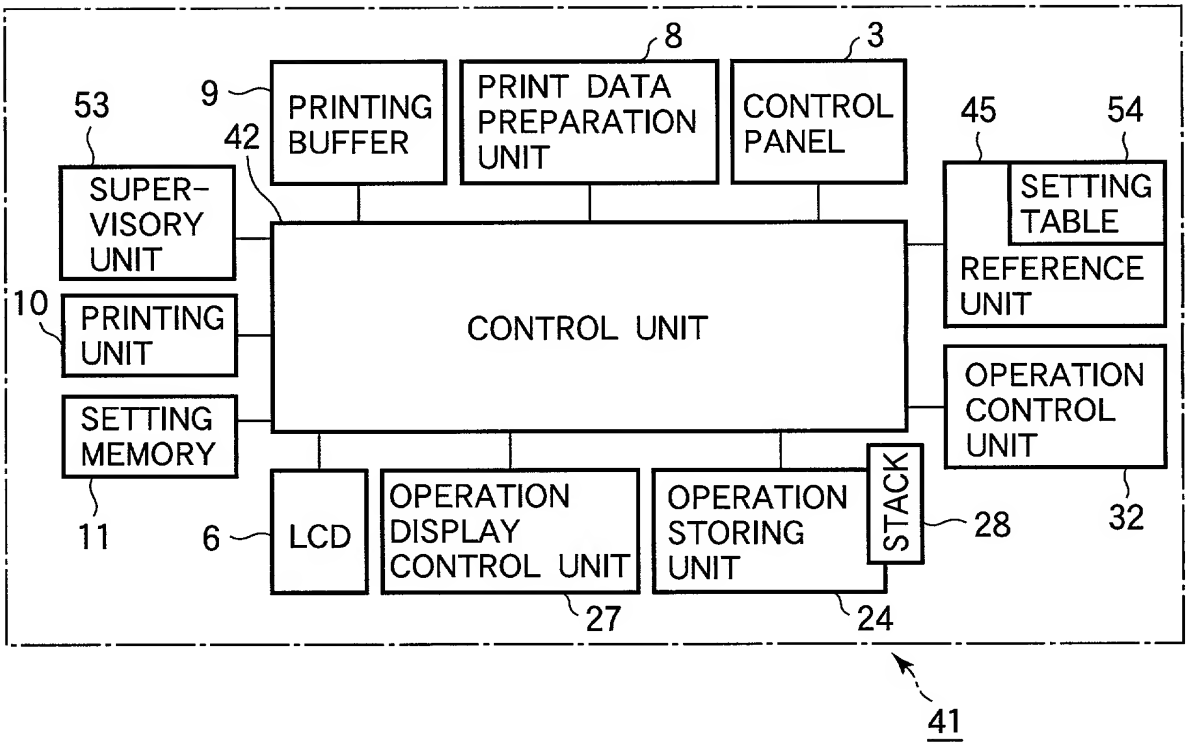


FIG.12

54

55 FUNCTION/ SERVICE/ ERROR CODE	56 OPERATION TRANSITIONS	57 SETTING NUMBERS	58 HELP LIST ADDRESS
TRANSMIT	[TEN, OT, AD], START	Y5, Y7, Y9, Y5, Y9, D5, D10, S12, S13, S38, S39	*6010
:	:	:	:
PRESCHEDULED TRANSMIT	FUNC, OT1, YES, TEN, YES, [TEN, OT, AD], START	Y5, Y7, Y9, Y5, Y9, D5, D10, S12, S13, S38, S39	*6050
1234 (PAPER SIZE ERROR)		Y13	*7030
BA01(ISDN)		Y30, Y31, S3, S40, S41, S42, S43	*7100

FIG.13A

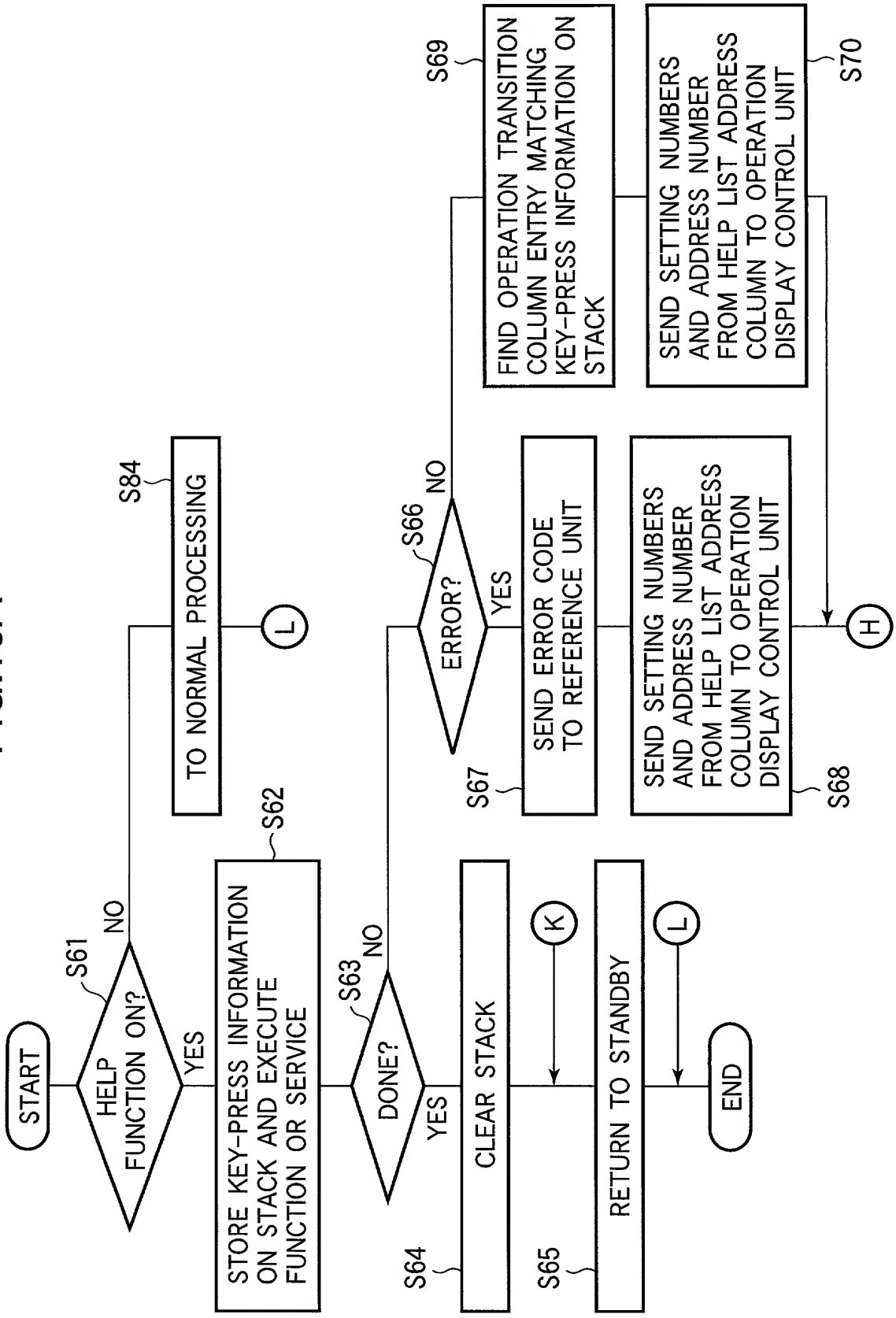

START
HELP FUNCTION ON?
S61
NO
YES
TO NORMAL PROCESSING
S84
L
STORE KEY-PRESS INFORMATION ON STACK AND EXECUTE FUNCTION OR SERVICE
S62
DONE?
S63
NO
YES
ERROR?
S66
NO
YES
SEND ERROR CODE TO REFERENCE UNIT
S67
FIND OPERATION TRANSITION COLUMN ENTRY MATCHING KEY-PRESS INFORMATION ON STACK
S69
SEND SETTING NUMBERS AND ADDRESS NUMBER FROM HELP LIST ADDRESS COLUMN TO OPERATION DISPLAY CONTROL UNIT
S70
SEND SETTING NUMBERS AND ADDRESS NUMBER FROM HELP LIST ADDRESS COLUMN TO OPERATION DISPLAY CONTROL UNIT
S68
H
CLEAR STACK
S64
K
RETURN TO STANDBY
S65
L
END

FIG.13B

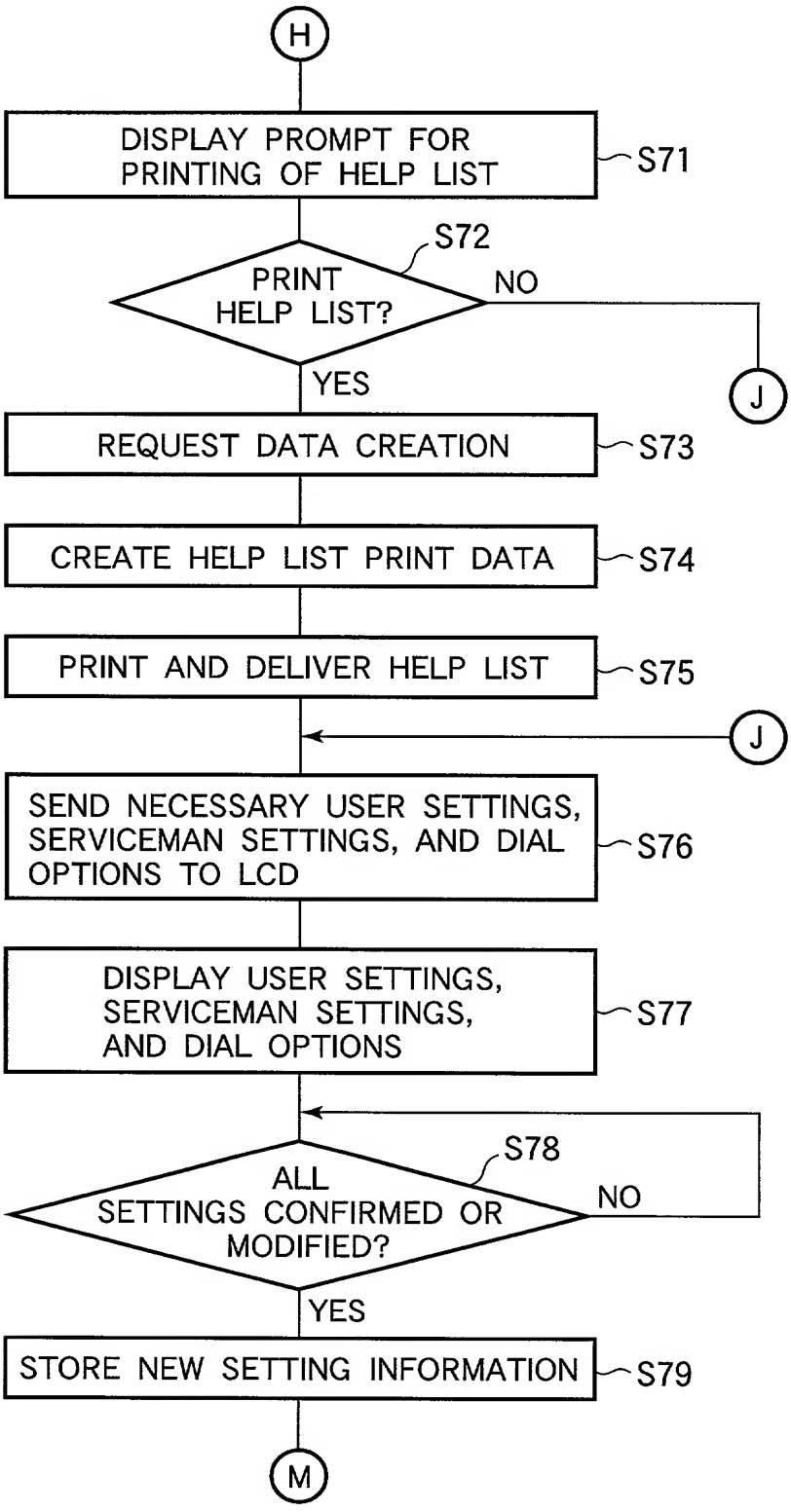
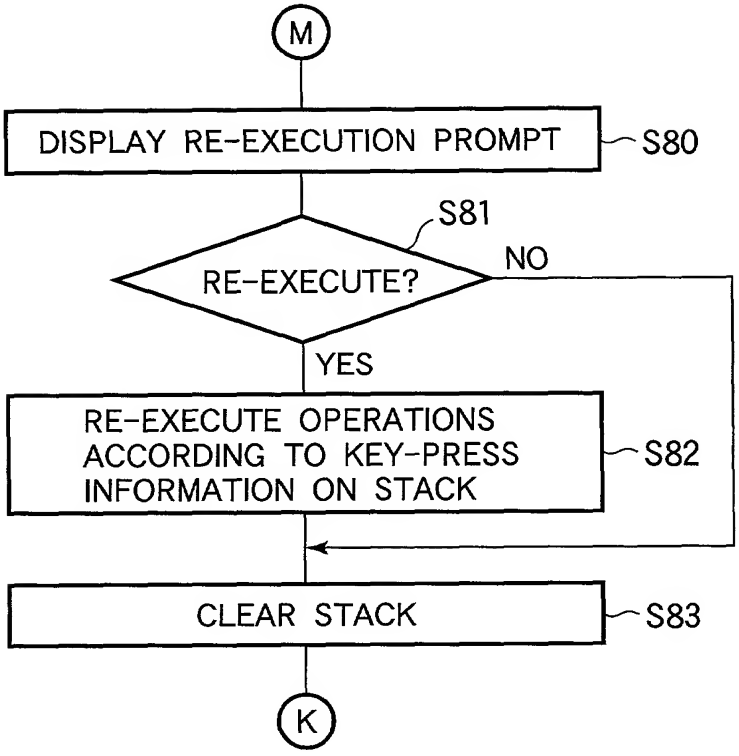

H
DISPLAY PROMPT FOR PRINTING OF HELP LIST
S71
S72
PRINT HELP LIST?
NO
YES
J
REQUEST DATA CREATION
S73
CREATE HELP LIST PRINT DATA
S74
PRINT AND DELIVER HELP LIST
S75
J
SEND NECESSARY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS TO LCD
S76
DISPLAY USER SETTINGS, SERVICEMAN SETTINGS, AND DIAL OPTIONS
S77
S78
ALL SETTINGS CONFIRMED OR MODIFIED?
NO
YES
STORE NEW SETTING INFORMATION
S79
M

FIG.13C



EXPRESS MAIL NO. EL916938537US